

In the Claims:

- 1 1. (original) A light emitting device of a II-VI group
2 compound semiconductor formed on a compound semiconductor
3 substrate and having an active layer between an n-type
4 cladding layer and a p-type cladding layer, comprising
5 a semiconductor barrier layer having a band gap larger
6 than a band gap of said p-type cladding layer, provided
7 between said active layer and said p-type cladding layer.
- 1 2. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 said light emitting device of the II-VI group compound
4 is a ZnSe based light emitting device;
5 said n-type cladding layer is an n-type $\text{Zn}_{1-x}\text{Mg}_x\text{S}_y\text{Se}_{1-y}$
6 ($0 < x < 1$, $0 < y < 1$) layer; and
7 said p-type cladding layer is a p-type $\text{Zn}_{1-x}\text{Mg}_x\text{S}_y\text{Se}_{1-y}$
8 ($0 < x < 1$, $0 < y < 1$) layer.
- 1 3. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 magnitude of the band gap of said barrier layer is
4 larger by 0.025 eV to 0.5 eV than the band gap of said
5 p-type cladding layer.

- 1 4. (currently amended) The semiconductor light emitting device
2 according to claim 1, wherein
3 in the band gap of said barrier layer, energy of
4 valence band is approximately the same as or higher than
5 that of said p-type cladding layer, and energy of
6 conductive band is larger than that of said p-type cladding
7 layer.
- 1 5. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 said barrier layer is of a II-VI group compound
4 semiconductor containing Be.
- 1 6. (original) The semiconductor light emitting device
2 according to claim 5, wherein
3 said barrier layer is of $\text{Zn}_{1-x-y}\text{Mg}_x\text{Be}_y\text{Se}$ ($0 \leq x + y \leq 1$,
4 $0 < x$, $0 < y$).
- 1 7. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 said barrier layer is of $\text{Zn}_{1-x}\text{Mg}_x\text{S}_y\text{Se}_{1-y}$.
- 1 8. (original) The semiconductor light emitting device
2 according to claim 1, comprising
3 a semiconductor trap layer having a band gap smaller
4 than a band gap of said p-type cladding layer, provided
5 between said barrier layer and said p-type cladding layer.

1 9. (original) The semiconductor light emitting device
2 according to claim 8, having a multi-stacked structure in
3 which a plurality of double-layer-structure of said barrier
4 layer and said trap layer are stacked.

1 10. (original) The semiconductor light emitting device
2 according to claim 8, wherein
3 said trap layer is of $\text{ZnS}_x\text{Se}_{1-x}$ ($0 \leq x \leq 0.1$).

1 11. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 said p-type cladding layer is formed of
4 $(\text{Zn}_{1-x}\text{Cd}_x\text{S})_{1-z}(\text{MgS}_{1-y}\text{Se}_y)_z$ (where x, y, z satisfy $0 < x \leq 1$,
5 $0 \leq y \leq 1$, $0 \leq z < 1$).

1 12. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 thickness of said barrier layer is at least 5 nm and
4 at most thickness of said active layer.

1 13. (original) The semiconductor light emitting device
2 according to claim 1, wherein
3 an n-type ZnSe single crystal substrate is used as
4 said compound semiconductor substrate.

1 14. (original) The semiconductor light emitting device
2 according to claim 1, wherein

3 an n-type GaAs single crystal substrate is used as
4 said compound semiconductor substrate.

1 15. (original) The semiconductor light emitting device
2 according to claim 1, wherein

3 in a stacked structure including said compound
4 semiconductor substrate constituting said ZnSe based light
5 emitting device, deviation between a peak of X-ray
6 diffraction of a plane orientation used as an index of
7 distortion from said substrate and a peak of X-ray
8 diffraction of said plane orientation from said stacked
9 structure is at most 1000 seconds.

Claims 16 to 22 (canceled).

[RESPONSE CONTINUES ON NEXT PAGE]